INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

C12N 15/12, 15/11, 15/90, C12Q 1/02, 1/68, C07K 14/705, 16/28, A61K 38/17, 39/395, 48/00, G01N 33/53

(11) International Publication Number:

WO 98/40480

(43) International Publication Date: 17 September 1998 (17.09.98)

(21) International Application Number:

PCT/EP98/01409

A1

(22) International Filing Date:

12 March 1998 (12.03.98)

(30) Priority Data:

60/040,969

12 March 1997 (12.03.97)

US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application

US

60/040.969 (CIP)

Filed on

12 March 1997 (12.03.97)

(71) Applicants (for all designated States except US): INSTI-TUT PASTEUR [FR/FR]; 25-28, rue du Dr. Roux, F-75724 Paris Cedex 15 (FR). CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE [FR/FR]; 3, rue Michel-Ange, F-75794 Paris Cedex 16 (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HOVANESSIAN, Ara [FR/FR]; 124, avenue du Général Leclerc, F-92300 Bourg la Reine (FR). CALLEBAUT, Christian [FR/FR]; 2 bis, rue de Nice, F-75011 Paris (FR). KRUST, Bernard [FR/FR]; 7, rue de Madagascar, F-75012 Paris (FR). JACOTOT,

Etienne [FR/FR]; 24, rue de Chambéry, F-75015 Paris (FR). MULLER, Sylviane [FR/FR]; 15, avenue de la Forêt Noire, F-67000 Strasbourg (FR). BRIAND, Jean-Paul [FR/FR]; 22, rue des Balayeurs, F-67000 Strasbourg (FR). GUICHARD, Gilles [FR/FR]; 5, rue de l'Arc en Ciel, F-67000 Strasbourg (FR).

(74) Agent: ERNEST GUTMANN-YVES PLASSERAUD S.A.; 3, rue Chauveau-Lagarde, F-75008 Paris (FR).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

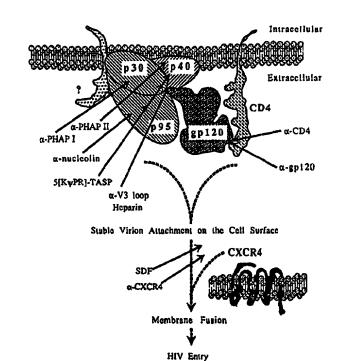
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: A NOVEL CELL SURFACE RECEPTOR FOR HIV RETROVIRUSES, THERAPEUTIC AND DIAGNOSTIC USES

(57) Abstract

The present invention pertains to a novel protein complex receptor for HIV retroviruses, namely the "V3 loop HIV receptor", which consists in the association of three proteins named P95/nucleolin, P40/PHAPII and P30/PHAPI. The invention also concerns peptidic or non peptidic molecules having the ability to alter and/or prevent the binding of the said novel HIV receptor to the HIV retrovirus, specifically to the gp120 glycoprotein of said HIV retrovirus. The invention is also directed to pharmaceutical and diagnostic compositions containing an effective amount of the molecules altering and/or preventing the binding of the HIV retrovirus to the novel HIV receptor as well as to therapeutic or diagnostic methods using such pharmaceutical or diagnostic composition. The invention also deals with methods of screening new active molecules having the ability to alter and/or prevent the binding of the said novel HIV receptor to the HIV retrovirus, specifically to the gp120 glycoprotein of said HIV retrovirus. Finally, the invention is directed to methods of screening genetic defects in the expression of P95/nucleolin, P40/PHAPII or P30/PHAPI in HIV resistant individuals as well as to specific diagnostic means useful to detect such genetic defects.



Ran may ũ Ü J